



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,413	12/18/2001	Paul William Marsh	71493-973 /pw	6445
7380	7590	06/30/2005	EXAMINER	
SMART & BIGGAR/FETHERSTONHAUGH & CO. P.O. BOX 2999, STATION D 900-55 METCALFE STREET OTTAWA, ON K1P5Y6 CANADA			WANG, QUAN ZHEN	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,413

Applicant(s)

MARSH ET AL.

Examiner

Quan-Zhen Wang

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 9-14, 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304,347 B1) in view of Barnard et al. (U.S. Patent US 6,115,157).

Regarding claims 1, 9, 12, 18, Beine teaches an optic communication system (fig. 3) having a plurality of network elements of a first type (fig. 3, 202, 206) each having a plurality of transmitters (fig. 3, transmitters associated with 202 and 206), each of the transmitters inherently having a minimum power level, a maximum power level and a current power level; a network element of a second type (fig. 3, 204 and 350) having a first database (column 8, lines 28-29, "internal memory") containing a respective plurality of values of power level adjustments (column 8, lines 28-29, "power parameters"), and a second database (column 8, lines 31-32, "parameter table"), the network elements of the first type connected to the network element of the second type by optical fiber (fig. 3, 210, 212), the method comprising the steps of: reading the plurality of values of power level adjustments from the first database (column 8, lines 28-31, "downloads the power parameter"); calculating new values of transmitter power

Art Unit: 2633

levels (column 8, lines 31-36, "power level parameters computed") based on the values stored in the first database and the information stored in the second database; and setting the transmitter powers levels to the new power levels (column 8, lines 33-36). Beine differs from the claimed invention in that Beine does not specifically teach querying the transmitters for their minimum power levels, maximum power levels and current power levels and writing information received in response to the querying of the transmitters to the second database. However, Barnard teaches to query maximum, minimum and current power levels of transmitters (column 9, 23-28, minimum power level is the level that "channel fails"). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to query maximum, minimum and current power levels of transmitters, as it is taught by Barnard, and write information received in response to the querying of the transmitters to the second database in the system taught by Beine in order to make that information available on demand for adjusting power values of transmitters, and for system information inquiry by a system manager.

Regarding claims 2, 10, 13, 19, Beine further teaches to write the plurality values of power level adjustments to the second database (column 8, 31-32, "parameter table").

Regarding claims 3, 11, 14, 20, it is inherent that the step of querying the transmitters taught by Barnard further comprises checking for the communications problems between the transmitters and the second type network element because the querying involves monitoring the channel performance (column 9, 25-30).

Regarding claims 21-23, although neither Beine nor Barnard specifically use the term "computer-readable media embodying a program", but both references disclose flow charts (see Beine, figs. 9A-9B; and Barnard, figs. 8A-8C) which inherently are carried out by computer-readable media embodying programs. In addition, it would have been obvious for one having ordinary skill in the art at the time when the invention was made to implement a method using a computer system incorporated with a computer program product to automate the process for reading parameters, querying transmitters for their information, calculating new values of transmitters power levels based on predetermined criteria, and setting the transmitters to the calculated new power levels.

2. Claims 4-5, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304, 347 B1) in view of Taylor et al. (U.S. Patent 6,684,030 B1).

Regarding claims 4, 15, Beine teaches a fiber optic communication system (fig. 3) having a plurality of network elements of a first type (fig. 3, 202, 206) each having a plurality of transmitters (fig. 3, transmitters associated with 202 and 206), a network element of a second type (fig. 3, 204 and 350) having a database (column 8, lines 28-29, "internal memory") containing a respective plurality of values of current power levels, previous power levels and power level adjustments of the transmitters (column 8, lines 28-29, "power parameters"). Beine further teaches reading the values of-current power levels, previous power levels and power level adjustments of the transmitters from the database (column 8, 29-31, "down load the power parameters"); Beine differs from the

claimed invention in that Beine does not specifically teach a user interface and displaying the values of current power levels, previous power levels and power level adjustments of the transmitters on the user interface. However, Taylor teaches a communication system with user interface connection to output data and information (column 5, lines 7-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to connect a user interface and display the values of current power levels, previous power levels and power level adjustments of the transmitters on the user interface, as it is taught by Taylor, to the communication system by Beine in order to make it easy for system management personnel to interact with the communication system and adjust the parameters of the system.

Regarding claims 5, 16, Beine further teaches checking for communication problem between the transmitters (fig. 3, transmitters in 202) and the network element of the second type (fig. 3, 204 and 350) (column 7, 18-20).

3. Claims 6-8, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304, 347 B1) in view of Taylor et al. (U.S. Patent 6,684,030 B1) and further in view of Barnard et al. (U.S. Patent US 6,115,157).

Regarding claims 6, 17, Beine further teaches reading the values of-current power levels, previous power levels and power level adjustments of the transmitters from the database (column 8, 29-31, "down load the power parameters"); calculating new values of transmitter power levels (column 8, lines 31-36, "power level parameters computed") based on the values stored in the first database and the information stored in the second database; and setting the transmitter powers levels to the new power

Art Unit: 2633

levels (column 8, lines 33-36). The modified system by Beine and Taylor differs from the claimed invention in that Beine and Taylor do not specifically teach querying the transmitters for their minimum power levels, maximum power levels and current power levels and writing information received in response to the querying of the transmitters to the second database. However, Barnard teaches to query maximum, minimum and current power levels of transmitters (column 9, 23-28). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to query maximum, minimum and current power levels of transmitters, as it is taught by Barnard, and write information received in response to the querying of the transmitters to the second database in the modified system taught by Beine and Taylor in order to make that information available on demand for adjusting power values of transmitters, and for system information inquiry by a system manager.

Regarding claim 7, Beine further teaches to write the plurality values of power level adjustments to the second database (column 8, 31-32, "parameter table").

Regarding claim 8, it is inherent that the step of querying the transmitters taught by Barnard further comprises checking for the communications problems between the transmitters and the second type network element because the querying involves monitoring the channel performance (column 9, 25-30).

Response to Arguments

4. Applicant's arguments filed 4/20/2005 have been fully considered but they are not persuasive.

The applicant argues that Beine does not disclose transmitters which are a part of each of network elements 202, 204, 206, or 208. However, figs. 14-18 clearly shown that the network elements have transmitters and receivers associated with them, and the power levels of the transmitters can be adjusted.

Since the system of Beine includes the power adjustment of transmitters, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to query maximum, minimum and current power levels of transmitters, as it is taught by Barnard, and write the information to the second database in the system taught by Beine in order to make that information available on demand for adjusting power values of transmitters, and for system information inquiry by a system manager.

According to the American Heritage College Dictionary, "database" is "a collection of data arranged for ease of retrieval". Therefore, any memory that holds tables or charts is considered a "database". Even though Beine does not specifically use the word "database", Beine discloses that in a network element of a second type (fig. 3, 204 and 350) there are "internal memory" (first data base) and "parameter table" (second database). Beine further discloses to compute power level parameters based on the information retrieved from the first and second databases. Therefore, the combination of Beine and Barnard clearly teaches all the limitations in the claims 1, 9, 12, and 18.

In response to the applicant's argument on claims 21-23, because the combination of Beine and Barnard clearly teaches all the limitations in the claims 1, 9, and it would have been obvious for one having ordinary skill in the art at the time when

Art Unit: 2633

the invention was made to implement a method using a computer system incorporated with a computer program product to automate the process for reading parameters, querying transmitters for their information, calculating new values of transmitters power levels based on predetermined criteria, and setting the transmitters to the calculated new power levels.

For the same reasons described above, the combination of Beine and Taylor teaches all the limitations of claims 4-5 and 15-16, and the combination of Beine, Taylor and Barnard teaches all the limitations of claims 6-8 and 17.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

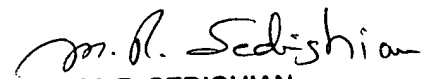
Art Unit: 2633

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan-Zhen Wang whose telephone number is (571) 272-3114. The examiner can normally be reached on 8:30 AM - 5:00 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qzw
6/25/2005


M. R. SEDIGHIAN
PRIMARY EXAMINER